

### **REMARKS**

Claims 24-46 are pending in this application. Claims 27-33 and 36-46 are withdrawn from consideration. Claims 24-26 and 34 stand rejected. Claims 27, 31 and 45-46 are canceled. Claim 24 is amended. A marked-up version of the claim amendments is enclosed. No new matter is introduced by this reply.

#### Objection to the Specification

✓ The specification has been objected to as failing to contain an abstract on a separate sheet as required by 37 C.F.R. §1.72(b). The abstract from the published PCT International Application has been reproduced on a separate sheet and is submitted herewith.

#### Unity of Invention

The Examiner repeated and made final the lack of unity requirement with respect to claim 24 and claims 25-44 which depend therefrom. As explained in greater detail below, claim 24 has been amended to recite a special technical feature, which distinguishes claim 24 over the prior art of record. Accordingly, claims 24-44 are all appropriately grouped as category II claims and withdrawal of the lack of unity requirement is believed in order.

Prior Art Rejections

Claims 24, 25 and 26 stand rejected as being anticipated by Seminara et al. Claims 24 and 34 stand rejected as being unpatentable over Seminara et al. in view of Lawrence et al. Applicant respectfully traverses the rejections.

Claim 24 as amended is patentable over Seminara et al. and Lawrence et al. As the Examiner points out, Seminara et al. discloses certain trivalent lanthanide metal complexes having hydrotis (pyrazol-1-yl)borate ions. Seminara et al. does not, however, disclose complexes wherein the pyrazol-1-yl groups are substituted by halo groups, as required by claim 24. Lawrence et al. does not teach or suggest complexes containing pyrazol groups substituted by halo groups or by halo-substituted alkyl or aryl group as required by claim 24.

It is clear from the specification (see page 10, lines 1 to 6) that these complexes provide advantages when used in electroluminescent devices. None of the cited prior art teaches that such advantages can be derived from these substituted -pyrazolyl-containing compounds.

Therefore, claim 24 is allowable.

Claims 25-26, 28-30, 32-44 depend from claim 24 and, therefore are also patentable over Seminara et al. and Lawrence et al.

**Applicant:** 09/445,050  
**Application No.:** Victor Christou

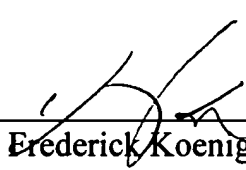
Accordingly, withdrawal of the prior art rejections based on Seminara et al. and Lawrence et al. is believed in order.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

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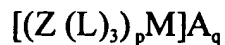
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Application No.: 09/445,050

Examiner: Lauren Q. Wells

**37 CFR §1.121(b)(1)(iii) and (c)(1)(ii) SPECIFICATION  
AND CLAIM AMENDMENTS- MARKED UP VERSION**

24. (Amended) An organometallic complex having the formula (I):



(I)

wherein Z is a carbon atom or R<sup>1</sup> - B fragment

p is 1, 2 or 3

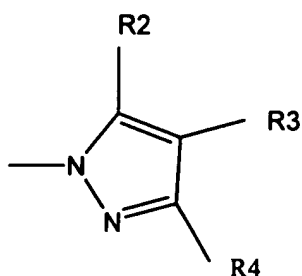
q is 3-p and

A is a counter ion

R<sup>1</sup> is: (i) hydrogen, aryl or aralkyl each optionally substituted

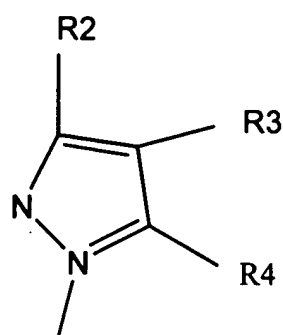
with from one to five halogen or C<sub>1</sub> to C<sub>6</sub> alkyl groups; or (ii) C<sub>1</sub> to C<sub>6</sub> alkyl, C<sub>1</sub> to C<sub>6</sub> alkenyl or C<sub>1</sub> to C<sub>6</sub> alkynyl each optionally substituted with one or more halogen atoms

each L is covalently bound to Z and is independently selected from a group of the formula (II) or (III)



(II)

or



(III)

in which  $R^2$ ,  $R^3$  and  $R^4$  are independently selected from:

- (i) halogen, cyano, nitro, sulphono, amino,  $C_1$  to  $C_6$  alkylamino,  $C_1$  to  $C_6$  alkylamido, carboxyl,  $C_1$  to  $C_6$  alkyloxycarbonyl, hydroxy,  $C_1$  to  $C_6$  alkoxy,  $C_1$  to  $C_6$  alkylcarbonyloxy,  $C_1$  to  $C_6$  alkylcarbonyl  $C_1$  to  $C_6$  haloalkoxy and hydrogen;
- (ii) aryl or aralkyl each optionally substituted on the aryl ring or, for aralkyl, on the alkylene chain with from one or more of the groups mentioned under (i) above; and
- (iii)  $C_1$  to  $C_6$  alkyl,  $C_1$  to  $C_6$  alkenyl or  $C_1$  to  $C_6$  alkenyl or  $C_1$  to  $C_6$  alkynyl each optionally substituted with one or more of the groups mentioned under (i) and (ii) above;

or either  $R^2$  and  $R^3$  or  $R^3$  and  $R^4$  are linked so as to form a fused aromatic or non-aromatic, ring system with the pyrazolyl ring of L;

and M is a trivalent lanthanide metal ion[.];

wherein in formula II or formula III  $R^4$  and/or  $R^2$  is  $-(CX_2)_nX$  wherein n is 0 or a positive integer from 1 to 6 and X is a halogen; or  $R^4$  and/or  $R^2$  is orthodihogenated or orthodiperhalomethylated aryl, optionally further substituted on the aryl ring.